

the Stern et al ('253) patent, each of those rejections is respectfully traversed for the reasons set forth below.

The cellular network of Stern et al, (figure 1; and column 2, lines 36-68; column 3, lines 1-21; column 4, lines 20-49; column 5, lines 1-47) illustrates two cellular systems that are not "independent" and are not capable of "sharing" radio frequencies as instantly claimed, but are in fact electrically "coupled" ("interconnected") in a control sense in order to reassign a percentage of call subscribers (not normally assigned frequency) from a first coupled system to the second coupled system, i.e., use the access channels (frequencies) allocated to the second system to complete the calls in the first system. The percentage disclosed by Stern et al can be fixed or variable depending on the parameters selected by the operator and the actual traffic load. Further in Stern et al, one system (M-system) serves to receive and process all the mobile phone requests for access (column 5, lines 101-27), and serves to receive and process all landline originated calls (column 5, lines 28-57). Therefore, the Stern et al patent does not teach or suggest the "first independent radio communication system" or the "second independent radio communication system" recited in the preamble of each claim **nor** does Stern et al teach or suggest the steps of:

"sharing by said first independent radio communication system ..." of claim 25

"sharing by said first independent radio communication system..." of claim 29

"allocating one or more frequency bands to said independent systems..." of claim

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or the provision of:

"a plurality of independent radio communication systems..." of claim 38

For each of these features, the Stern et al reference teaches a solution of electrically "interconnecting"/"coupling" the radio systems such that one system (e.g., X-system) becomes a "slave" to the other system (e.g., M-system) and therefore no longer satisfies the "independent" feature of the instant claims within the meaning of the instant specification, see column 5, lines 5-28; column 18, lines 31-68; column 19, lines 1-25. Further, in describing the invention in the 102(b) and 103(a) rejections, the examiner **did not** point to any "shared frequency" embodiments

in Stern et al in the sense that frequencies normally used by one system are, in a fashion, transferred to and used by another system. The undersigned has diligently studied Stern to find such an embodiment and cannot find any shared frequency embodiments in Stern et al as are described in the specification of this application, and within the scope of the claims 25-28, 33-35, 38 or 40. Each of the cellular network embodiments of Stern et al are electrically interconnected/coupled in order to provide the sharing of “dynamically selectable percentage of telephone calls originated by radiotelephones from said second ...system to said first...system by was of access-only channels”. For these reasons, the Examiner’s rejections of claims 25-28, 33-35, 38, 40 under 35 U.S.C. 102(b), and claims 27 and 28 under 35 U.S.C. 103(a) are improper and should be withdrawn.

With regard to the rejection of claims 33-41 under 112 (first paragraph) as containing new matter in the recitation of “exclusively” when assigning control channels, said rejection is also respectfully traversed for the reasons set forth below. In order to reduce the issues and expedite the prosecution toward an indication of allowability for claims 33-41, the applicants have removed the term “exclusively” as being not necessary for claims 33, 38 and 39 since cellular network telephone communication systems, at the time of filing the instant application, inherently assigned a fixed portion of the frequency bandwidth, which the network was authorized to use for cellular communication, as a control channel in order to perform network operations. Support for this inherent “exclusively” feature is based on the instant specification, at column 18, lines 31-68, to column 19, line 64. Note, particularly that column 19, lines 45-46, recite “individual” carriers broadcasting (pricing) information over “individual command channels”. Here the command channel is the control channel in the claims. Please note that column 18, lines 44-47 of the instant specification would seem to counter this inherent “exclusively” feature since second “voice” channels that are “rented” can be instructed to use protocols which are “command”, “control” or “data” protocols on the rented channel, BUT the fact that other rented channels (frequencies) of a particular network are instructed by the “renting” network to operate as command, control or data channels has no bearing on the network that provides the “renting” capability from having an exclusively assigned command/control channel. Nor does it preclude the network that receives the “renting” channels from having a first portion of its allotted

frequency band operating exclusively as a control channel. For the reasons outlined above, the Examiner's rejection of claims 33-41 under 35 U.S.C. 112 (first paragraph) has been rendered moot and should be withdrawn.

With regard to the rejection of claims 42-46 under 35 U.S.C. 251 as constituting impermissible recapture since the features of claim 23 "network monitoring means..." and "generating a signal..." are not now present in claims 42-46, said rejection is also respectfully traversed.

The arguments presented hereinbelow are similar to those applied with regard the 35 USC 251 rejection relying upon patent claims 1 and 13 in the Amendment of September 6, 2001, in that the invention of claim 23 is a different embodiment of the disclosed invention from those inventions set forth in claims 42-46 (see Exhibits 1-5 - claims charts illustrating each feature of claims 23 with similar/dissimilar features of claims 42-46). In the current Office action, the Examiner asserts that submission of the above claims 42-46 constituted impermissible broadening of subject matter from the originally patented claim 23 wherein the above identified features "network monitoring means..." and "generating a signal..." do not appear in claims 42-46.

The applicants traverse this finding of impermissible "recapture" under In re Clement for several reasons.

Initially, the applicants would point out that In re Clement teaches that recapture of surrendered material occurs when the patentees make amendments to the patented claims which broaden the scope of the patented claims wherein the subject matter of the broadening is directly related to subject matter which was surrendered (by amendment) to secure allowance during the Patent Office proceedings which resulted in issuance of the original patent. In Clement the patentees presented, during original examination, amendments as shown below in underline, which continually narrowed the one and only independent method claim, drawn to a method of processing pulp to remove "stickees" and inks, in order to avoid the prior art applied by the Examiner:

A method of treating a mixture of printed and contaminated waste paper in order to produce a pulp for use in the manufacture of paper and paperboards, said waste paper containing non-ink contaminants including stickies, which method comprises:

(a) forming a first aqueous fibrous suspension of said waste paper at room temperature by applying specific mechanical energy lower than 50 KW.H/Ton to form a pumpable slurry and to release substantially all of the non-ink contaminants including the stickies, from the surface of the paper and without dispersing such non-ink contaminants as finely divided particles throughout the fibrous suspension;

(b) removing substantially all of the non-ink contaminants including the stickies, which have been released without dispersal as finely divided particles from the first fibrous suspension by screening and cleaning at room temperature to form a second aqueous fibrous suspension substantially free of the non-ink contaminants including the stickies;

(c) after the step of removing the non-ink contaminants softening the ink vehicles and weakening their binding with the surface of the fibers by submitting the second fibrous suspension at a consistency of more than 15% to the simultaneous actions of (A) a high temperature between 85.degree. and 130.degree. C., (B) high shear forces substantially corresponding to a specific mechanical energy of more than 50 KW.H/Ton applied at the said consistency of more than 15% and (C) at least one deinking agent under strong alkaline conditions having a pH of at least 9; and

(d) detaching the ink particles from the surface of the fibers and dispersing them into the second fibrous suspension by submitting the second fibrous suspension to the simultaneous actions of (A) high temperature between 85.degree. and 130.degree. C., (B) high shear forces substantially corresponding to a specific mechanical energy of more than 50 KW.H/Ton applied at the said consistency of more than 15% and (C) at least one chemical dispersing agent, under strong alkaline conditions having a pH of at least 9 whereby higher specific energy inputs and higher temperatures are used to detach the ink particles from the fibers of the second fibrous suspension after removal of the non-ink contaminants than are used on the first fibrous suspension before removal of the non-ink contaminants;

(e) limiting the total duration of the ink softening and detaching steps (c) and (d) to a range between 2 and 10 minutes and

(f) removing the detached ink particles from the second fibrous suspension to provide a brightness of at least 59 ISO the final pulp.

The patentee, in the subsequently filed reissue application tried to remove those limitations, shown in double underline above, as being unduly restrictive. The Clement decision states that such removal of limitations added to secure allowance of a claim, rejected on prior art, is impermissible. As originally issued, the Clement patent included only a single independent claim which had been the subject of repeated narrowing amendments during the prosecution proceedings prior to issuance of the Clement patent. No independent claim(s) to other embodiments, such as treatment systems, compositions, or products was submitted during the original examination or in the reissue proceeding. Based on this fact pattern (and other litigated reissue cases to follow), the Clement court was able to identify claimed subject matter that was “surrendered” in order to secure allowance of the original patent.

In contrast to Clement, the prosecution of the subject ‘621 patent provides no bright line of demarcation regarding subject matter “surrendered.” for claim 23. In particular, as initially filed, the application which resulted in issuance of the ‘621 patent included the precursors of independent claims 1 and 13 directed respectively to a system for radio frequency management for reallocation of the radio spectrum (claim 1) and a method for reallocation of radio frequency spectrum (claim 13). Following a prior art rejection, claims 1 and 13 were amended and simultaneously a new independent claim (claim 23) was submitted by the response received in the U.S. Patent and Trademark Office on May 22, 1995 (Exhibit 1). As shown in the comparison Chart A (see Exhibit 3 attached to the Amendment of September 6, 2001), newly submitted claim 23 was drawn to another embodiment of the disclosed invention which does not share many features with claims 1 and 13. Claim 23 is directed to:

“A radio frequency management system for providing information useful in selecting among a plurality of wireless communication networks having different and variable operating characteristics” (emphasis added – see Chart A in RED) including “processing means” connected with “network load monitoring means...for receiving a signal indicative of said current network load and for generating a signal representing current operational characteristics of each of the wireless communications networks in response thereto” and including “network information transmission means...”

Accordingly claim 23, submitted at the time of the alleged “surrender” of patentable subject matter, is directed to a different radio frequency management system from claims 1 and 13 that facilitates selection from among a plurality of networks having different and variable operating characteristics where the operating characteristics can include “bandwidth” i.e. assigned frequency. Thus, claim 23 (which was never rejected under prior art or under any other patent statute) broadly covers radio frequency management systems that facilitate selection among plural networks that differ from one another in a variety of ways.

In a recent CAFC decision dated July 25, 2001, Pannu et al. v. Storz Instruments Inc. (CAFC July 2001) (See Exhibit 5 attached to the Amendment of September 6, 2001), the court reaffirmed that application of the recapture rule of Clement was a three-step process. The first step is to “determine whether and in what ‘aspect’ the reissue claims are broader than the patent claims.” The second step is to “determine whether the broader aspects of the reissued claim related to surrendered subject matter.” Finally, the court must determine whether “the reissued claims were materially narrowed in other respects to avoid the recapture rule.” Citing Hester, 46 USPQ2d at 1,649-50 (See Exhibit 7 attached to the Amendment of September 6, 2001). Applicants respectfully submit that the outstanding rejection of applicants’ claims 42-46 is unsupportable under this three-step process.

Initially, reference is made to Exhibits 1-5 (attached) where it is shown that claim 23 shares no common feature or element with claims 42-46 except for the “network information transmission means” of claim 23 and claim 45. Therefore, when compared to virtually all elements of claim 23 new claims 42-46 are broader than claim 23. At the same time, a review of Exhibits 1-5 shows that many of the specific features of the individual elements recited in claims 42-46 render these claims narrower than claim 23. Thus as illustrated in Exhibits 1-5, the inventions of claims 42-46 are clearly drawn to different embodiments from that of claim 23.

Second, (the initial analysis notwithstanding) the prosecution history of the ‘621 patent in no way supports the Examiner’s holding that applicants clearly surrendered subject matter indicated by the features highlighted in the Examiner’s rejection, i.e., “network monitoring means...” and “generating a signal...” since claims 23 and 24 were the **first and original** presentation of another different embodiment from the inventions disclosed (which were never

amended to narrow their scope). Claim 23, as allowed, is as originally presented in the Response of May 22, 1995 to the Examiner's first Office action of November 18, 1994. The applicants are entitled to broaden claims 23 and 24, under 35 USC 251, without fear of recapture since the invention of claims 23-24 (which is a different embodiment from among the inventions disclosed in the specification) was never rejected on any statutory grounds nor narrowed by any subsequent amendment. Simply put, since claims 23 and 24 were the first presentation of that embodiment drawn to a different invention than that of claims 1-22 and were never amended in any manner, then nothing was ever surrendered with regard to the invention of claims 23 and 24 (and the recapture "rule" cannot apply).

Third, claims 42-46 are each materially narrowed in ways that cause these claims to avoid the recapture rule. As Exhibits 1-5 indicate, each of claims 42-46 are broader in most respects and narrower (see Exhibit 4 – "network information transmission means") in a single aspect than claim 23 as issued in the subject '621 patent. A review of the instant specification reveals that the subject invention has a number of different embodiments, and claims 42 through 46 are directed to still other embodiments that were omitted, through error without deceptive intent, during the prosecution and issuance of the '621 patent.

In particular, each of the newly presented claims 42-46 is drawn to a wireless communication system organized to promote user driven competition among a plurality of independent wireless networks by permitting the selection of an available network depending on the network characteristics (claims 42, 43, 45, 46) or user defined criteria (claims 42, 44), which can include the strength of signal, cost of call, network availability, and network security. While each of claims 42-46 share features from both claim 1 and claim 23, **none** of the claims 42-46 is drawn to the specific combination of features defining a system for "radio frequency management for providing information useful..." as specifically defined in claim 23. Therefore, claims 42-46 are mutually narrowed in ways to avoid the recapture rule.

Finally and most importantly, Court-decisions and the PTO rules specially recognize that claims directed to additional embodiments of an invention may be submitted in a Reissue application. For example, the presentation, in one or multiple reissue applications, of additional embodiments of a disclosed and patented invention (that is, the filing of continuing (reissue)

applications for parts of the initial patent which **are not for separate and distinct parts of the thing patented**) is specifically permitted by In re Graff, 111 F.3d 874, 42 USPQ 2nd 1471, see MPEP 1451- **DIVISION REISSUE APPLICATIONS**.

In summary, In re Clement and Pannu et al provide no precedential guidance for extending the “recapture rule” of surrendered subject matter in one embodiment (“A radio frequency management system” of claim 23) of an invention that was originally presented and unamended to other embodiments (“A wireless communication system...” of claims 42-46) of the invention, i.e., methods of making, compositions, or products. Note, that in both Clement (USP 4,780,179) and Hester (USP 4,582,047) only a single inventive embodiment (claim) was presented in the form of a single independent claim; while in Pannu et al (USP 4,435,855) two independent claims were presented, a device (claim 1) and a method (claim 10), but only the device embodiment (claim) was the subject of reissue amendments determined to constitute impermissible broadening. In each case, the single independent embodiment sought for reissue was the same embodiment presented in each of the original patents, unlike the presently submitted claims 42-46 which are drawn to other embodiments of the invention disclosed in the original specification.

Further, the applicants have illustrated above that the subject matter referred to by the Examiner as being “broadened” was not in fact surrendered as required by second step of Pannu et al. In the response of May 22, 1995 (Exhibit 1), pending claim 1 was indeed amended, but in the very same amendment, new independent claim 23 was added which constituted a different invention from that of claims 1-22 and included none of the limitations that were added to claim 1. That embodiment of claim 23 was an original (first) presentation of another embodiment of the disclosed invention that was never rejected on any statutory grounds or later amended (narrowed). Lastly, since claims 42-46 have been materially narrowed in other aspects to avoid recapture (i.e., limited to “independent” or “commercially independent” networks and to a “wireless communication system to promote user driven competition” (claims 42-45) or a “wireless communication system organized to permit maximum utilization of the available radio spectrum” (claim 46)), the Examiner’s holding of impermissible recapture under 35 U.S.C. 251 for claims 42-46 is improper and the rejection should be withdrawn.

For the reasons set forth above, claims 25-46 are in condition for allowance. However,



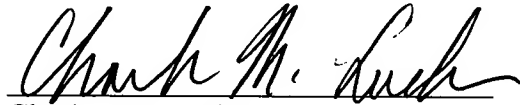
should the Examiner find some issue to remain unresolved, or should any new issues arise, which could be eliminated through discussions with applicant's representative, then the Examiner is invited to contact the undersigned by telephone in order that the further prosecution of this application can thereby be expedited.

Since the Examiner has found that copied claims 29-32 are in condition for allowance, the applicants request that consideration immediately begin, pursuant to MPEP 2307.02 (copy attached), of the Request for Declaration of Interference 37 CFR 1.607 filed on September 8, 1999 concerning copied claims 26-41 from USP 5,805,633.

Respectfully submitted,

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**ATTACHMENT TO AMENDMENT**

**IN THE CLAIMS:**

Please amend claims 33, 38 and 39 as follows.

33. In a cellular radio communication network comprising a plurality of systems each providing service within a common geographic area, and operating within a frequency range comprising a plurality of frequency bands, a method of allocating frequency bands to said systems said method comprising the steps of:

assigning one or more first frequency bands to each of said systems, wherein said first frequency bands are used [exclusively] for control channels within the systems to which each is assigned; and

allocating one or more second frequency bands to said systems on a shared basis, wherein said second frequency bands are used for traffic channels within the system to which each is currently allocated.

38. A cellular communications network providing service over a frequency range comprising a plurality of first frequency bands and a plurality of second frequency bands, said network comprising:

a plurality of radio communications systems, each of said systems providing service in a coverage area, the coverage areas of each of said systems having a common area, each of said systems being [exclusively] assigned one or more of said first frequency bands for use as control channels for each system and providing service over said plurality of second frequency bands on a shared basis.

39. The cellular communications network of claim 38 in which one or more of said systems is [exclusively] assigned one or more fixed frequency bands for providing service in

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addition to providing service over said plurality of shared frequency bands.